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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,736	11/26/2003	Brian L. Mueller	02022US	7284

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Rodel Holdings, Inc.
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1105 North Market Street
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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,736	Applicant(s) MUELLER ET AL.	
	Examiner Michael A Marcheschi	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/29/04</u> | 6) <input type="checkbox"/> Other: ____ |

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Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite because the phrase "the phthalate salt" lacks antecedent basis since a "phthalate salt" has not been literally defined before. The examiner acknowledges the limitation "phthalic acid and salts thereof" but this does not provide literal antecedent basis for the above phrase.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-7 and 9-10 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishimoto et al. (305).

Nishimoto et al. teach in the abstract, sections [0034]-[0050] and [0078]-[0108] and the claims, an aqueous polishing composition (for polishing the claimed materials) which comprises water, 0.01-10 wt. % of an abrasive (ceria having the claimed size), 0.005-5 wt. % of a quaternary ammonium compounds, at most 1 wt. % of a water soluble polymers (polyacrylic acid) and at most 1 wt. % of phthalic acid or salt thereof. The composition has a varying pH.

The claimed invention is anticipated by the reference because the reference teaches all of the claimed features. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as obvious over Nishimoto et al. (305).

With respect to the specific phthalic salt, the primary reference states that phthalic salts can be used and this makes obvious the claimed salt because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shemo et al. (140) alone or in view of EP 1 223 609.

Shemo et al. teach in the abstract and column 5, line 24-column 7, line 50, an aqueous polishing composition which comprises water, 0.1-50 wt. % of an abrasive (ceria having the claimed size), 0.0001-3 wt. % of at least one polishing resistance-reducing agent (quaternary

ammonium compounds and water soluble polymers are usable materials-see column 6, lines 28+), and 0.001-40 wt. % of an organic acid or salt thereof.

The EP reference teaches that polyacrylic acid is a water soluble polymer.

Shemo et al. teach the claimed invention because the reference states that the composition contains **at least one** polishing resistance-reducing agent, thus making the combination of quaternary ammonium compounds and water soluble polymers obvious because they are both polishing resistance-reducing agents. With respect to the individual amounts, the polishing resistance-reducing agent is present in an amount of 0.0001-3 wt. % and it is the examiners position that the combination defined above implies that any individual amounts can be used as long as the final amount is within the recited range. With respect to the specific quaternary ammonium compounds and water soluble polymers, these are obvious because "**A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)**". In addition, the EP reference shows that polyacrylic acid is a water soluble polymer. With respect to the specific acid and salt thereof, the primary reference states that an organic acid or salt thereof can be used and since phthalic acid and a phthalates are an organic acid and salt thereof, respectively, they are obvious from the reference disclosure because "**A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)**". Finally, although the reference does not literally define a pH, all composition must have a pH and it is the examiners position that since

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the reference fails to mention any specific pH (criticality), this (the absence of any such limitation) constitutes a broad teaching of pH values, as long as the final polishing composition is obtained. In view of this, it can be reasonably interpreted that the claimed pH values are encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Streinz et al. (686) in view of Shemo et al. (140) and EP 1 223 609.

Streinz et al. teach in the abstract and column 3, line 57-column 7, line 40, an aqueous polishing composition which comprises water, 0.5-55 wt. % of an abrasive (ceria having the claimed size), 0.5-15 wt. % of a quaternary ammonium compound (oxidizer), and 0.05-15 wt. % of phthalic acid or salt thereof. Other conventional polishing additives can be added. The composition has a pH within the claimed range.

The EP reference teaches that polyacrylic acid, a water soluble polymer, is a known conventional polishing additive.

Streinz et al. teach the claimed invention because it is stated that any conventional polishing additive can be added and this makes the addition of a water soluble polymer obvious because both of the secondary references teach that this is a conventional polishing composition additive. The motivation to add this material is defined by the primary reference statement that "any known polishing slurry additives can be added". In addition, the EP reference shows that polyacrylic acid is a water soluble polymer. With respect to the specific phthalic salt, the primary reference states that phthalic salts can be used and this makes obvious the claimed salt

because "A generic disclosure renders a claimed species *prima facie* obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)". Finally, with respect to the specific quaternary ammonium compounds these are obvious because "A generic disclosure renders a claimed species *prima facie* obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species *prima facie* obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

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The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

The references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

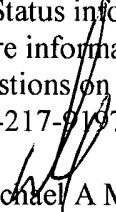
The examiner acknowledges the results defined in the instant tables, but these results are only limited to a specific quaternary compound (i.e. TMAH). In addition, a sufficient amount of comparative evidence **has not been** provided to establish unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael A Marcheschi
Primary Examiner
Art Unit 1755

10/04
MM